



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,664	07/14/2006	Sai Shankar Nandagopalan	PHUS030247	2487
24737	7590	05/04/2010	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			OBAYANJU, OMONYI	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2617	
MAIL DATE		DELIVERY MODE		
05/04/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,664	Applicant(s) NANDAGOPALAN, SAI SHANKAR
	Examiner OMONIYI A. OBAYANJU	Art Unit 2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 March 2010.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 and 14-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-11 and 14-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 02 December 2008 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/06)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/11/2010 has been entered.

Response to Arguments

Applicant's arguments filed 03/11/2010 have been fully considered but they are not persuasive.

Applicant amended and argues that the prior art reference (Cimini, JR. et al.) fails to teach with respect to the independents claims at least in part "determining an allocated transmission time for each of the wireless stations based on a set physical transmission rate, wherein each of the wireless stations has individually allocated transmission time based on at least the amount of data that needs to be transmitted by each of the wireless stations."

In regards to the above claimed limitations, Applicant specifically argued that (Cimini) does not disclose or suggest "...individually allocated transmission time based on at least the amount of data that needs to be transmitted by each of the wireless

Art Unit: 2617

stations, and thus the transmissions times of the wireless stations are not necessary approximately the same".

In response, the Examiner respectfully disagrees with Applicant's argument. In **fig. 10, pp [0057] – pp [0060]**, Cimini further teaches "...individually allocated transmission time based on at least the amount of data that needs to be transmitted by each of the wireless stations" (transmission time also depends on the impact of packet shaping process i.e. limiting packet size (amount)). Furthermore, the prior art reference teaches that the transmission rate are "**approximately the same**" not "**exactly the same**". Therefore, Cimini teaches the broadly claimed limitation of the present invention as fully discussed in the rejection.

Response to Amendment

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11, and 14-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Cimini, JR. et al. (US Publication No. 20030133427).

As to claim 1, Cimini teaches a method of providing bandwidth fairness in a wireless network that includes a plurality of wireless stations (abs, and pg. 4, pp0049, lines 7-8), the method comprising: determining bandwidth requirement (abs, and pg. 3, pp0036, lines 1-8) for a particular service interval (pg. 1, pp0005 lines 13-16) for each of the wireless stations (fig. 1b, #12a,b,c); determining an (different, fig. 5) allocated transmission time for each of the wireless stations based on a set physical transmission rate (pg. 3, pp0034 lines 14-16, and pp0037, lines 1-9), wherein each of the wireless stations has individually allocated transmission time based on at least the amount (size of packet) of data that needs to be transmitted by each of the wireless stations (fig. 10, pp0057-pp0060); and fragmenting a packet by at least one of the wireless stations if the at least one wireless station transmits at a transmission rate that is lower than the set physical transmission rate (pg. 5, pp0060, lines 1-4 and pp0048, lines 13-15).

As to claim 2, Cimini teaches wherein the allocated time for each of the plurality of wireless stations is the proportional to the quantity of data to be sent by the respective stations (abs) during a service interval (pg. 1, pp0005 lines 13-16).

As to claim 3, Cimini teaches wherein for each of the at least one wireless station a number of the fragments is equal to the set physical transmission rate divided by the lower transmission rate (pg. 4, pp0042 lines 7-11).

As to claim 4, Cimini teaches wherein the allocated transmission time is equal to the total data of all packets generated in the beacon interval divided by the set physical transmission rate (pg. 4, pp0049).

As to claim 5, Cimini teaches wherein the wireless network is a multiple physical transmission rate wireless network (pg. 2, pp0030, lines 5-10).

As to claim 6, Cimini teaches wherein the wireless network is a Generalized Packet Radio Service (GPRS) network (pg. 1, pp0003, lines 11-12, Transmitting data at different transmitting rate is equivalent to (GPRS) network).

As to claim 7, Cimini teaches wherein the wireless network is a Wireless Local Area Network (WLAN) (pg.1, pp0003, line 1).

As to claim 8, Cimini teaches wherein each of the at least one wireless stations transmits all remaining fragments after all wireless stations that transmit at the set physical transmission rate have completed transmitting their packets (pg. 5, pp0062, lines 1-5).

As to claim 9, Cimini teaches further comprising maintaining a particular quality of service QoS for each of the wireless stations that maintain transmission at the set physical transmission rate during a service interval (pg. 3, pp0037 lines 8-15).

As to claim 10, Cimini teaches wherein each of the at least one wireless stations transmits all remaining fragments (fragments equivalent to packet) until its physical transmission rate is greater than the set physical transmission rate (pg.5, pp0057, lines 1-7).

As to claim 11, Cimini inherently teaches similar limitations in the method of claim 1 as discussed above.

As to claim 14, Cimini teaches wherein the number of fragments is equal to the lower transmission rate divided by the set transmission rate (pg. 4, pp0042 lines 7-11).

As to claim 15, Cimini teaches wherein the transmission time is equal to the total data of all packets generated in the beacon interval divided by the set physical transmission rate (pg. 4, pp0049).

As to claim 16, Cimini teaches wherein each of the plurality of wireless stations is adapted to transmit at multiple physical transmission rates (pg. 2, pp0030, lines 5-10).

As to claim 17, Cimini teaches wherein the wireless network is a Generalized Packet Radio Service (GPRS) network (pg. 1, pp0003, lines 11-12, Transmitting data at different transmitting rate is equivalent to (GPRS) network).

As to claim 18, Cimini teaches where the wireless network is a Wireless Local Area Network (WLAN) (pg.1, pp0003, line 1).

As to claim 19, Cimini teaches wherein a particular quality of service (QoS) is maintained for each of the plurality of wireless stations that transmit at the set physical transmission rate for the entire service interval (pg. 3, pp0037 lines 8-15).

As to claim 20, Cimini teaches wherein each of the wireless stations that change their transmission rate to a lower transmission rate than the set physical transmission rate during the service interval (pg. 1, pp0005 lines 13-16) send their remaining fragments after all wireless station that transmit at the set transmission rate have completed transmission of their respective packets (pg. 5, pp0062, lines 1-5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMONIYI A. OBAYANJU whose telephone number is (571)270-5885. The examiner can normally be reached on Mon - Fri, 7:30 - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/O. A. O./
Examiner, Art Unit 2617

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art
Unit 2617